

11/08/06

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MEMORANDUM

TO: Randall Connolly, Superfund Coordinator
JSK

FROM: Dr. F. E. Kirschner, Senior Scientist

DATE: November 8, 2006

SUBJECT: Comments on "TECHNICAL MEMORANDUM NO. I PRELIMINARY
ECOLOGICAL RISK MANAGEMENT-BASED ACTION
OBJECTIVES", October 27 2006 Prepared by Teck Cominco for the
Upper Columbia River Settlement Agreement

CC: Councilman Nicodemus
Rudy Peone
Shannon Work
File

This memo constitutes a review of the aforementioned document. In preparing these comments, the Tribe has attempted to focus on issues that could make a difference in the RI/FS and ultimately selection of the remedy in the Preferred Plan.

In order to minimize paperwork and unnecessary added burden on the USPS, a hardcopy of this document will not be mailed. Please contact us if you have problems opening the attached files. If you have any other questions, please feel free to contact us any time.

AESE, Inc.

11/14/06



General Comments

1. Whether risk-based or based in laws or regulations, Preliminary Remedial Action Objectives (PRAOs) are intended to set the initial clean-up performance standards for the site. These initial standards are the basis for developing all subsequent studies. For example, they dictate the necessary laboratory detection limits and as well as the degree to which one must be able to discriminate between pre-release baseline and current conditions (i.e. the nature and extent of contamination). In summary, the PRAOs are one of the critical components that shape the remainder of the RI/FS.

(b) (5) Congress reserved in the tribes the rights to the paramount use of relevant Lake Roosevelt areas for fishing, hunting and boating. The Spokanes have not waived these rights and plan to rely on natural resources of the UCR basin in the future as they have in the past. In order to protect human health in areas used by the Tribe, the Tribe firmly believes that preliminary cleanup levels should be set at pre-release baseline conditions. It is our experience that incorrectly specifying PRAOs at levels that are higher than pre-release baseline (PRB) conditions will have negative consequences that will likely cause significant areas of contamination to go unaddressed in the cleanup plan.

Using this approach will correctly shift the focus of study toward determining PRB in a spatial context. Assessing excess risk attributable to releases from the facility, as required by the National Contingency Plan, can follow, once the spatial comparisons between PRB and current conditions for each primary and/or secondary medium have been completed. This is much like the approach applied in developing the preliminary remedial goals for the Midnite Mine on the Spokane Reservation.

EPA has three general tools to remediate sites: (1) removal, (2) stabilization in place, and (3) institutional controls (i.e. "hang a sign on it") that are not necessarily mutually exclusive. Although the settlement agreement uses the terms "Remedial *Management* Action Objectives" and "Remedial Action Objectives" interchangeably, the term "management" has the connotation of not employing removals to remediate the site.

As voiced by the Tribe during the October 17, 2006 meeting in Spokane, the term "management" as used in this document implies that the ROD could dictate how the natural resource trustees would be required to manage our resources. Any remedy that commits the Tribe to long-term management requirements is unacceptable to the Tribe.

The Tribe recommends that only terms and concepts that are consistent with NCP be used and that the term "Management" be removed as necessary to make the document compatible with the NCP.

- (b) (5)
3. Risk needs to be defined early in this document. Although the concept of risk from site-related contaminants is described in last clause in Paragraph 2 of Page 1, "*....and support risk-based assessment of potential exposures by ecological receptors to Site-related contaminants.*", it appears that incremental risk attributable to the site and total risk (risk from all sources) is used interchangeably.

(b) (5)

Specific Comments

1. Table 1. Table 1 needs to include as a RAO "***to reduce to acceptable levels the uptake and transfer of COCs within the human and ecological food-chains***". If the ERA does not evaluate intraweb transfer, then the human health risk assessment will need to do this.

2. Table 1. The term "Populations" in Table 1 and elsewhere needs to be defined as "***populations that reside at the site or otherwise would reside at site, but for contamination released from the site***". This specificity is required to avoid confusion with respect to larger or national populations of receptors that are not affected by the site.

3. Table 1. Sediments Heading;

"Mitigate or prevent dispersion of sediment COCs through aerial transport [and hydrodynamic dispersion] to uncontaminated locations where unacceptable resource exposure may occur"

This change or a similar category dealing with hydrodynamic dispersion must be included.

4. Table 1. Surface Water Heading;

"Prevent exposure of ecological receptors to COCs at water concentrations that exceed potential applicable or relevant and appropriate requirements (ARARs) for surface water quality"

Note that the Spokane Tribe has ARARs for media other than Surface Water that are not listed in this Table. These ARARs have been provided to TEK's consultants.

5. Page 3, Paragraph 2; Sentence 2:

"Accordingly, the phrase "reduce to acceptable levels the risks" used in the preliminary ecological RMAOs summarized in Table 1 refers to decreasing the unacceptable risks associated with the presence of COCs at the Site by means that are appropriate to the circumstances present, and may include but not necessarily be limited to lowering/mitigating their concentrations, mobility, bioavailability, toxicity, and/or exposure to receptors."

The Tribe requests the following statement to be inserted at this location:

"Since the Tribes and other subsistence users rely on many of the ecological resources for sustenance, the ecological receptors must be managed to meet Human Health criteria as well. For those resources that are used heavily by these groups, the Human Health criteria will likely drive management activities and PRAOs."

6. Page 3, Paragraph 2; Last Sentence:

"Thus, reference to acceptable contaminant levels presented in this memorandum does not reflect Site-specific numeric guidelines or standards (i.e., preliminary remediation goals), which will be developed after the ERA is completed."

What risk-based criteria will be used to determine numerical standards for the ecological receptors? Hazard Index of 1 that is based on site-derived COCs?

7. Page 3, Paragraph 3; First Sentence:

(b) (5)

"In their preliminary form, these ecological RMAOs broadly encompass the primary exposure pathways and receptors of concern at the Site."

There is absolutely no evidence to support this statement. As discussed in General Comment No. 1, if these PRAOs are relied upon to design future studies, there is potential to encounter negative consequences that will likely cause significant areas of contamination to go unaddressed in the cleanup plan.